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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/367,949 12/17/99 WULF J 4539US

EXAMINER
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MMC2/0831

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SCHUBERG, D	
ART UNIT	PAPER NUMBER

2872

DATE MAILED:

08/31/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.  
**09/367,949**

Applicant(s)  
**Wulf et al**

Examiner  
**Darren Schuberg**

Group Art Unit  
**2872**



- ☐ Responsive to communication(s) filed on \_\_\_\_\_.
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

- ☒ Claim(s) 1-16 is/are pending in the application.
- Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 1-8 and 11-16 is/are rejected.
- ☒ Claim(s) 9 and 10 is/are objected to.
- ☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☒ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been
- ☐ received.
- ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.
- ☒ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

- ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- ☒ Notice of References Cited, PTO-892
- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- ☐ Interview Summary, PTO-413
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3, 5/1, 11/1 and 13/1 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 96/09548 ("WO-548").

The WO-548 document teaches all of the claimed elements, including a light emission device (8) emitting a beam with a wavelength suitable for creating fluorescence in a sample, focusing optics (10), a holding device (1) for releasably holding a sample (5) and a detection unit (11) which shares part of its optical path with the light emitter and which receives light from the sample. The holder is rotated to allow for rotation of the sample. The focusing optics is displaceable in the radial direction of the holder. Figure 3 shows the use of a pinhole diaphragm (35) in front of a detector for ensuring proper illumination and reading. The detector and emitter are both shown to be fixed relative to each other.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 12/1, 15/1 and 16/1 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO-548 in view of the U.S. patent of Modell.

WO-548 teaches all of the claimed elements, as explained above, except for the blocking filter in front of the detector for blocking exciting light or for passing only a desired wavelength, and multiple laser diodes with a plurality of wavelengths. Modell, drawn to a sample fluorescing system, teaches a wavelength filter (90) which blocks unwanted wavelengths, including the source exciting wavelengths. Modell also features multiple laser diodes in an array (40) which are different frequencies (wavelengths). It would have been obvious to one of ordinary skill in the art to use the teachings of Modell in the WO-548 device in order to ensure detection of only the desired wavelength of light, thus eliminating noise, and to

provide multiple wavelengths which can provide a more detailed description of the sample being tested.

5. Claim 14/1 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO-548 in view of the U.S. patent of Landa.

WO-548 teaches all of the claimed elements, as explained above, except for the use of optical fibers to couple the light. Landa, drawn to a fluorescence analyzer, teaches the use of optical fibers to deliver and receive light in a fluorescence system. It would have been obvious to one of ordinary skill in the art to use fibers, as taught by Landa, to deliver and receive the light in the WO-548 device in order to maintain alignment of the system and reduce noise from outside light sources.

6. Claims 2, 4, 5/2, 6-8, 11/2 and 13/2 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO-548 in view of EP 753779 ("EP-779").

As explained above, WO-548 teaches all of the claimed elements except for the rotation of the focusing optics to conduct the exciting light along a circular arc on the sample. EP-779 teaches such a rotation of the exciting light over a sample. It would have been obvious to one of ordinary skill in the art to use the optics rotation teaching of EP-779 to rotate the optical system of WO-548, thus allowing for maintaining a steady sample which will be unaffected by any rotational noise. EP-779 also uses a dichroic beam splitter which would have been

obvious to use with the WO-548 device for directing only fluoresced light to the detector.

7. Claims 12/2, 15/2 and 16/2 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO-548 in view of EP-779, as taught above, and further in view of Modell.

WO-548, in obvious combination with the teachings of EP-779, teaches all of the claimed elements, as explained above, except for the blocking filter in front of the detector for blocking exciting light or for passing only a desired wavelength, and multiple laser diodes with a plurality of wavelengths. Modell, drawn to a sample fluorescing system, teaches a wavelength filter (90) which blocks unwanted wavelengths, including the source exciting wavelengths. Modell also features multiple laser diodes in an array (40) which are different frequencies (wavelengths). It would have been obvious to one of ordinary skill in the art to use the teachings of Modell in the WO-548 device, as modified by the EP-779 teachings, in order to ensure detection of only the desired wavelength of light, thus eliminating noise, and to provide multiple wavelengths which can provide a more detailed description of the sample being tested.

8. Claim 14/2 rejected under 35 U.S.C. 103(a) as being unpatentable over WO-548 in view of EP-779 as applied to claims 2 and 13 above, and further in view of Landa.


WO-548, in obvious combination with the teachings of EP-779, teaches all of the claimed elements, as explained above, except for the use of optical fibers to couple the light. Landa, drawn to a fluorescence analyzer, teaches the use of optical fibers to deliver and receive light in a fluorescence system. It would have been obvious to one of ordinary skill in the art to use fibers, as taught by Landa, to deliver and receive the light in the WO-548 device, as modified by the EP-779 teachings, in order to maintain alignment of the system and reduce noise from outside light sources.

#### ***Allowable Subject Matter***

9. The following is a statement of reasons for the indication of allowable subject matter: The use of two associated pairs of focusing optics and detecting units, in combination with the rest of the claimed elements, is not taught or suggested by the prior art.

#### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. European patent 504 432, identified in the international stage search, teaches a similar device.



Application/Control Number: 09/367,949  
Art Unit: 2872

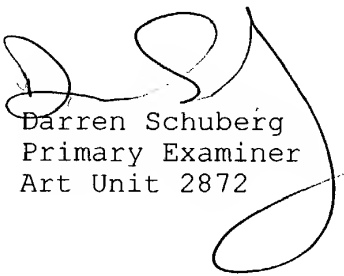
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11. Papers related to this application may be submitted by facsimile transmission. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The fax number for Art Unit 2872 is (703) 308-7722.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Darren Schuberg whose telephone number is (703) 308-4815.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0956.

August 25, 2000

  
Darren Schuberg  
Primary Examiner  
Art Unit 2872